Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A modified polypeptide ~~containing~~ comprising: ~~at least~~ an immunodominant region, and

~~the~~ a connecting loop between N- and C-helices of a gp41 ectodomain of HIV-1, ~~wherein~~ the connecting loop ~~includes~~ comprising ~~at least~~ a linker fragment, ~~having:~~

wherein the linker fragment is configured to:

maintain a ~~size convenient for keeping the~~ native conformation of ~~the~~ an interaction between the N- and C -helices, and

have a hydrophilicity that provides ~~an hydrophily sufficient to provide~~ a soluble and stable trimeric form to said modified polypeptide.

2. (Currently Amended) The modified polypeptide according to claim 1, wherein said linker ~~is included in substitution of~~ replaces all or ~~only~~ a part of a ~~deleted~~ wildtype oligopeptide deleted ~~along~~ from the connecting loop.

3. (Currently Amended) The modified polypeptide according to claim 1, wherein said linker ~~is in substitution of~~ replaces ~~a deleted wildtype sequence located in region 598-622, and in particular in region~~ amino acid residues 603 to 615 of SEQ ID NO 1.

4. (Currently Amended) The modified polypeptide according to claim 1, wherein said linker ~~is in substitution of a deleted wildtype sequence located in region *525-549*, and in particular in region~~ replaces amino acid residues 530 to 542 of SEQ ID NO 14.

5. (Currently Amended) The modified polypeptide according to claim 2, wherein said deleted wildtype oligopeptide has at least 10~~, in particular 13, and more particularly 25~~ amino acid residues.

6. (Currently Amended) The modified polypeptide according to claim 1, wherein said linker is an oligopeptide ~~linker~~.

7. (Currently Amended) The modified polypeptide according to claim 6, wherein ~~said oligopeptide linker is mainly based on hydrophilic~~ most of the amino acid residues of the linker are hydrophilic.

8. (Currently Amended) The modified polypeptide according to claim 1, ~~including as linker fragment, the oligopeptide of~~ wherein the linker comprises the amino acid sequence set forth in SEQ ID NO 2.

9. (Currently Amended) The modified polypeptide according to claim 1, wherein ~~including furthermore in its~~ the immunodominant region has at least one mutation ~~to prevent~~ that prevents a cross reaction of ~~the~~ a B type cell and/or of ~~the~~ a T type cell with a host protein.

10. (Currently Amended) The modified polypeptide according to ~~claim 1~~ claim 9, wherein the mutation prevents cross reaction with IL-2.

11. (Currently Amended) The modified polypeptide according to claim 9, wherein said mutation is located ~~at least in part of the~~ in a sequence selected from the group consisting of the sequences set forth in ~~SEQ ID NO 3, SEQ ID NO 4, SEQ ID NO 5, and/or SEQ ID NO 6~~ SEQ ID NOs: 3-6.

12. (Currently Amended) The modified polypeptide according to claim 1, wherein it ~~may~~ further comprises additional modification selected from amino acid residue mutation, deletion and/or insertion for improving solubility of said modified polypeptide.

13. (Currently Amended) The modified polypeptide according to claim 1, wherein it is selected from the group consisting of the polypeptides set forth in ~~of~~ SEQ ID NO 8, SEQ ID NO 17, SEQ ID NO 18, SEQ ID NO 19, and SEQ ID NO 20.

14. (Currently Amended) The modified polypeptide according to claim 1, wherein it is the polypeptide ~~of~~ set forth in SEQ ID NO 8.

15. (Currently Amended) The modified polypeptide according to claim 1, ~~being furthermore an~~ wherein it is N-truncated ~~oligopeptide,~~ with a length of deletion being of a size ranging from 8 to 15 amino acid ~~residue~~ residues.

16. (Currently Amended) The modified polypeptide according to claim 15, wherein it is truncated ~~in particular~~ of at least 10 amino acid residues~~, and more particularly of at least 12 amino acid residues~~ at the N-terminal position.

17. (Previously Presented) The modified polypeptide according to the claims 15, wherein it is a polypeptide as set forth in SEQ ID NO 21.

18. (Withdrawn) A polynucleotide encoding the modified polypeptide according to claim 1.

19. (Withdrawn) The polynucleotide of claim 18 which is DNA.

20. (Withdrawn-Currently Amended) The polynucleotide according to claim 18, wherein it is ~~a~~ the polynucleotide ~~of~~ set forth in SEQ ID NO 7.

21. (Withdrawn) An expression vector comprising at least a transcription promoter, a DNA segment encoding the modified polypeptide according to claim 1 and a transcription terminator.

22. (Currently Amended) A vaccine composition containing ~~at least~~ as an active ingredient a modified polypeptide as defined in claim 1.